

UNITED STATES DEPARTMENT OF COMMERCE National Oceanic and Atmospheric Administration NATIONAL OCEAN SERVICE

Monterey Bay National Marine Sanctuary 299 Foam Street Monterey, California 93940

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To: Interested Parties

There is a growing interest and discussion of the use of marine reserves (no-take areas) as a tool to manage marine resources. In addition, there have been questions of the effectiveness of the three existing marine reserves in the Monterey Bay National Marine Sanctuary (Sanctuary): Hopkins Marine Life Refuge; Point Lobos Ecological Reserve; and Big Creek Ecological Reserve. In July 2001, the Sanctuary commissioned local researchers to review the ecological effectiveness of subtidal marine reserves in central California.

The new enclosed report is composed of two parts, "Part I: Synopsis of Scientific Investigations" and "Part II: Summary of Existing Marine Reserves in Central California and their Potential Benefits." The first part of the report provides summaries of several research projects conducted within the three existing marine reserves in the Monterey Bay National Marine Sanctuary and one marine reserve in the Channel Islands National Marine Sanctuary. It also includes a chapter discussing lessons to be learned from marine reserves in temperate and tropical parts of the world, and a chapter on social and economic considerations pertinent to the public policy decision-making processes associated with marine reserves. The second part of the report evaluates the effectiveness of the three existing marine reserves in the Sanctuary and one marine reserve in the Channel Islands National Marine Sanctuary by comparing existing information with the predicted benefits of seven potential goals for marine reserves identified by the National Research Council (2001). A synopsis such as this helps the community to form educated opinions regarding the effectiveness of marine reserves, and the role of reserves in ecosystem protection.

The information reviewed and results summarized in this report vary among the existing marine reserves. Several themes, however, are presented.

- The small size of existing marine reserves in Central California prevents them from achieving many of the goals and benefits attributed to marine reserves in the scientific literature.
- The older marine reserves in Central California show some of the primary benefits associated with protection from exploitation, including modest increases in size and abundance of fishes.
- If marine reserves are to be developed and successfully used in Central California as a tool for fisheries management, they will need to be integrated into existing fishery management processes. In addition, monitoring programs, that clearly identify a set of effectiveness parameters, will need to be established.



• Public participation, including buy-in to management goals, objectives, and regulations, is necessary for effective natural resource management.

Information contained in this publication will be used to advise the National Marine Sanctuary Program during the central California Joint Management Plan Review, and possibly by other agencies and groups. We hope you will take time to read the enclosed complimentary copy. Copies of the report will soon be available from the Sanctuary website (http://montereybay.nos.noaa.gov).

Regards,
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WILLIAM J. DOUROS Superintendent